

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
26 May 2006 (26.05.2006)

(10) International Publication Number  
**WO 2006/054147 A1**

(51) International Patent Classification:  
*F01L 13/00* (2006.01)

[JP/JP]; 1-40-1 Shinkoyasu, Seresu Nissan 305, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0013 (JP).

(21) International Application Number:  
PCT/IB2005/003423

(74) Agent: **POLGLAZE, Daniel, J.**; Leffert, Jay & Polglaze, P.A., 150 South Fifth Street, Suite 1900, Minneapolis, MN 55402 (US).

(22) International Filing Date:  
15 November 2005 (15.11.2005)

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
JP2004-332623 17 November 2004 (17.11.2004) JP

(71) Applicant (*for all designated States except US*): **NISSAN MOTOR CO., LTD.** [JP/JP]; N°2 Tama-cho, Kanagawa-ku, Yokohama-shi Kanagawa-ken (JP).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

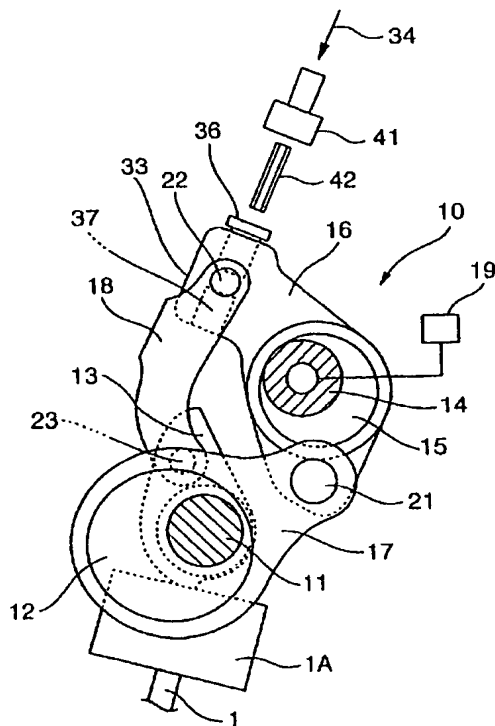
(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **AKASAKA, Yuuzou**

[Continued on next page]

(54) Title: VALVE MECHANISM LIFT ADJUSTMENT DEVICE AND METHOD

(57) Abstract: Rotating drive shaft (11) is connected to a crankshaft and valve cam (13). Valve cam (13) lifts intake and exhaust valves, are linked by a plurality of links (16-18). The amount of lift of intake and exhaust valves is adjusted by adjusting the position of connector pin (22), which passes through links (16) and (18) and allows for their relative rotation. The adjustment of connector pin (22) is configured so that it is performed from single adjustment direction (34) using prescribed adjustment tools (41) and (42).



WO 2006/054147 A1